

Abstract:

The present invention relates to an organic-inorganic hybrid film material consisting of polyamide and either poly(silsesquioxane) or silicon alkoxide and to a process for producing the organic-inorganic hybrid film material. The present process can effectively reduce the phase separation and can produce an organic-inorganic hybrid film material having 0-100% organic content.

The present process can control desired properties of the resultant hybrid film material by adjusting the ratio of the organic and inorganic material, such as refractive index, birefractive index, dielectric index, and flatness of the film. Also, the present organic-inorganic hybrid film material possesses excellent heat-resistivity and is suitable for an IC process requiring high processing temperature.